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10/590,476	04/24/2007	Tomoyo Sasaki	TSM-5485	9704

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MATTINGLY & MALUR, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

WITZENBURG, BRUCE A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,476	Applicant(s) SASAKI ET AL.	
	Examiner BRUCE A. WITZENBURG	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. With respect to the claim language filed 08/24/2006, claims 1-12 are pending in the instant application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7, 8, and 12 are rejected under 35 U.S.C. 101 as being directed towards functional descriptive material *per se*. While the implementation of the computer program of the above claims as claimed is capable of causing a computer to carry out functionality, it is not necessarily recorded on a computer readable storage medium and therefore is not necessarily structurally or functionally related to operation of a computer. The above computer programs must be embodied on a computer readable storage medium. (See MPEP 2106.01)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto (US 5,768,129) hereafter "Miyamoto."

Regarding claim 1, Miyamoto discloses an environmental load aggregation apparatus for aggregating environmental load information in life stages of a product, said environmental load aggregation apparatus comprising:

a part information storage device which stores part information on various parts or the product, said part information including information on other parts having a parent-child relationship to the various parts; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose "part information" it is apparent from the specification of Miyamoto that the processes disclosed pertain to the production of parts and thus it remains at least obvious over the disclosure to direct the invention to physical "parts." Additionally note the above claim is further rejected as "parts" may also be interpreted as any portion of a whole including processes to produce it.)

a process information storage device, which stores process information on a process relating to production of a part or the product, said process information being defined by a supplier of the part or the product and comprising information on environmental load items affecting environment in said process, information on a basic process

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corresponding to said process among basic processes that are defined by a predetermined rule and that relate to the production of the product, and information on a part to which said process is tied; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose anyone of a specific role defining process information, it does disclose an openly available input section and it would have been at least obvious to one of ordinary skill in the art at the time of the invention to allow the supplier of a part to define such information as they are generally the most knowledgeable about it if it is not already inherent within the implementation of Miyamoto)

a stage definition information storage device, which stores stage definition information on a life stage of the product, the stage definition information being defined by the supplier of the product and comprising information on a basic process assigned to said life stage; (Abs, Col 2, lines 47-53; Col 4, lines 1-8 Note that while Miyamoto does not specifically disclose "stage definition information" the interrelated processes define stages "during a life cycle of a product from its production to its disposal" and in this case the processes can be considered to define the stage of the life cycle) and

an environmental load information aggregation device, which receives designation of the product and aggregates environmental load information in life stages of the designated product; wherein said environmental load information aggregation device performs: processing for specifying each component part of the designated product,

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using the part information of each part, which is stored in said part information storage device; processing for searching the process information storage device for process information on a process tied to each of the specified parts; processing for classifying retrieved pieces of process information according to a life stage to which a basic process included in each piece of process information is assigned, using the stage definition information of the supplier of the designated product, which is stored in said stage definition information storage device; and processing for aggregating the environmental load information included in the retrieved pieces of process information, for each life stage. (Abs, Col 2, lines 54-59; Col 4, line 44 – Col 5, line 16)

Regarding claim 2, claim 2 is rejected for substantially the same reason as claim 1 above.

Regarding claim 3, claim 3 is rejected for substantially the same reason as claim 1 above. Note input includes display of related parts / processes.

Regarding claim 4, claim 4 is rejected for substantially the same reason as claim 1 above with the exception that Miyamoto does not disclose a “disclosure level,” however data protection is well known and appreciated in the art and it would have been obvious to one of ordinary skill in the art to include a form of “disclosure level” for sensitive information to prevent unauthorized disclosure or use of said information.

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Regarding claim 5, Miyamoto discloses an environmental load aggregation method, in which a computer aggregates environmental load information in life stages of a product, wherein:

a storage unit of said computer stores: part information, which is information on various parts or the product and includes information on other parts having a parent-child relationship to the various parts; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose “part information” it is apparent from the specification of Miyamoto that the processes disclosed pertain to the production of parts and thus it remains at least obvious over the disclosure to direct the invention to physical “parts.” Additionally note the above claim is further rejected as “parts” may also be interpreted as any portion of a whole including processes to produce it.)

process information, which is information on a process relating to production of a part or the product, said process information being defined by a supplier of the part or the product and comprising information on environmental load items affecting environment in said process, information on a basic process corresponding to said process among basic processes that are defined according to a predetermined rule and relate to the production of the product, and information on a part to which said process is tied; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose anyone of a specific role defining process information, it does

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disclose an openly available input section and it would have been at least obvious to one of ordinary skill in the art at the time of the invention to allow the supplier of a part to define such information as they are generally the most knowledgeable about it if it is not already inherent within the implementation of Miyamoto) and

stage definition information, which is information on a life stage of the product, the stage definition information being defined by the supplier of the product and comprising information on a basic process assigned to said life stage; (Abs, Col 2, lines 47-53; Col 4, lines 1-8 Note that while Miyamoto does not specifically disclose "stage definition information" the interrelated processes define stages "during a life cycle of a product from its production to its disposal" and in this case the processes can be considered to define the stage of the life cycle)

and an operation unit of said computer performs:

a step of specifying each component part of a designated product, using the part information of each part, which is stored in said part information storage device; (Col 3, lines 54-62; Col 5, lines 7-16; lines 34-67)

a step of searching the process information storage device for process information on a process tied to each of the specified parts; (Col 5, lines 34-67)

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a step of classifying retrieved pieces of process information according to life stage to which a basic process included in each piece of process information is assigned, using the stage definition information of the supplier of the designated product, which is stored in said stage definition information storage device; and (Abs, Col 2, lines 54-59; Col 3, lines 54-62; Col 4, line 44 – Col 5, line 16; lines 34-67)

a step of aggregating the environmental load information included in the retrieved pieces of process information, for each life stage. (Abs, Col 2, lines 54-59; Col 4, line 44 - Col 5, line 16)

Regarding claim 6, claim 6 is rejected for substantially the same reason as claim 4 above.

Regarding claim 7, a computer-readable program, wherein a storage unit of a computer stores: part information, which is information on various parts or a product and includes information on other parts having a parent-child relationship to the various parts; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose “part information” it is apparent from the specification of Miyamoto that the processes disclosed pertain to the production of parts and thus it remains at least obvious over the disclosure to direct the invention to physical “parts.” Additionally note the above claim is further rejected as “parts” may also be interpreted as any portion of a whole including processes to produce it.

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process information, which is information on a process relating to production of a part or the product, said process information being defined by a supplier of the part or the product and comprising information on environmental load items affecting environment in said process, information on a basic process corresponding to said process among basic processes that are defined by a predetermined rule and relate to the production of the product, and information on a part to which said process is tied; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose anyone of a specific role defining process information, it does disclose an openly available input section and it would have been at least obvious to one of ordinary skill in the art at the time of the invention to allow the supplier of a part to define such information as they are generally the most knowledgeable about it if it is not already inherent within the implementation of Miyamoto) and

stage definition information, which is information on a life stage of the product, the stage definition information being defined by the supplier of the product and comprising information on a basic process assigned to said life stage; (Abs, Col 2, lines 47-53; Col 4, lines 1-8 Note that while Miyamoto does not specifically disclose "stage definition information" the interrelated processes define stages "during a life cycle of a product from its production to its disposal" and in this case the processes can be considered to define the stage of the life cycle) wherein said program realizes, in an operation unit of said computer:

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a function of specifying each component part of a designated product, using the part information of each part, which is stored in said part information storage device; (Col 3, lines 54-62; Col 5, lines 7-16; lines 34-67)

a function of searching the process information storage device for process information on a process tied to each of the specified parts; (Col 5, lines 34-67)

a function of classifying retrieved pieces of process information according to a life stage to which a basic process included in each piece of process information is assigned, using the stage definition information of the supplier of the designated product, which is stored in said stage definition information storage device; (Abs, Col 2, lines 54-59; Col 3, lines 54-62; Col 4, line 44 – Col 5, line 16; lines 34-67) and

a function of aggregating the environmental load information included in the retrieved pieces of process information, for each life stage. (Abs, Col 2, lines 54-59; Col 4, line 44 - Col 5, line 16)

Regarding claim 8, claim 8 is rejected for substantially the same reason as claim 4 above.

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Regarding claim 9, Miyamoto discloses an environmental load aggregation apparatus for aggregating environmental load information in life stages of a product, said environmental load aggregation apparatus comprising:

a part information storage device, which stores part information on various parts or the product, said part information including information on other parts having a parent-child relationship to the various parts; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose "part information" it is apparent from the specification of Miyamoto that the processes disclosed pertain to the production of parts and thus it remains at least obvious over the disclosure to direct the invention to physical "parts." Additionally note the above claim is further rejected as "parts" may also be interpreted as any portion of a whole including processes to produce it.)

a process information storage device, which stores process information comprising information on a basic process relating to production of the product, which is defined by a predetermined rule, and information on a part to which said process information is tied; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose anyone of a specific role defining process information, it does disclose an openly available input section and it would have been at least obvious to one of ordinary skill in the art at the time of the invention to allow the supplier of a part

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to define such information as they are generally the most knowledgeable about it if it is not already inherent within the implementation of Miyamoto)

an environmental load information storage device, which stores environmental load information comprising information on a basic process and information environmental load items affecting environment in said basic process; (Abs, Col 2, lines 54-59; Col 4, line 44 – Col 5, line 16)

a life stage definition information storage device, which stores stage definition information comprising information on basic processes assigned to each life stage of the product; (Abs, Col 2, lines 47-53; Col 4, lines 1-8 Note that while Miyamoto does not specifically disclose “stage definition information” the interrelated processes define stages “during a life cycle of a product from its production to its disposal” and in this case the processes can be considered to define the stage of the life cycle) and

an environmental load information aggregation device, which receives designation of the product and aggregates environmental load information in life stages of the designated product; (Abs, Col 2, lines 54-59; Col 4, line 44 – Col 5, line 16) wherein

said environmental load information aggregation device performs: processing for specifying each component part of the designated product, using the part information of each part, which is stored in said part information storage device; processing for

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searching the process information storage device for process information on a process tied to each of the specified parts; processing for classifying retrieved pieces of process information according to a life stage to which a basic process included in each piece of process information is assigned, using the stage definition information of the designated product, which is stored in said stage definition information storage device; and processing for reading environmental load information including information on a basic process included in each of the retrieved pieces of process information, from said environmental load information storage device, and aggregating the environmental load information included in the read pieces of process information, for each life stage. (Abs, Col 2, lines 54-59; Col 4, line 44 – Col 5, line 16)

Regarding claim 10, claim 10 is rejected for substantially the same reason as claim 9 above.

Regarding claim 11, Miyamoto discloses an environmental load aggregation method, in which a computer aggregates environmental load information in life stage of a product, wherein: a storage unit of said computer stores: part information, which is information on various parts or the product and includes information on other parts having a parent-child relationship to the various parts; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose “part information” it is apparent from the specification of Miyamoto that the processes disclosed pertain to the production of parts and thus it remains at least obvious over the disclosure to direct the

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invention to physical "parts." Additionally note the above claim is further rejected as "parts" may also be interpreted as any portion of a whole including processes to produce it.)

process information, which comprises information on a basic process relating to production of the product, said basic process being defined according to a predetermined rule, and information on a part tied to said basic process; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose anyone of a specific role defining process information, it does disclose an openly available input section and it would have been at least obvious to one of ordinary skill in the art at the time of the invention to allow the supplier of a part to define such information as they are generally the most knowledgeable about it if it is not already inherent within the implementation of Miyamoto)

environmental load information comprising information on a basic process and information on environmental load items affecting environment in said basic process; (Abs, Col 2, lines 54-59; Col 4, line 44 – Col 5, line 16)

and stage definition information comprising information on a basic process assigned to each life stage of the product; (Abs, Col 2, lines 47-53; Col 4, lines 1-8 Note that while Miyamoto does not specifically disclose "stage definition information" the interrelated processes define stages "during a life cycle of a product from its production to its

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disposal” and in this case the processes can be considered to define the stage of the life cycle)

and an operation unit of said computer performs: a step of receiving designation of the product through an input unit; (Col 2, lines 35-42; Col 3, lines 55-62; Col 4, lines 27-33)

a step of specifying parts constituting the designated product, using the part information of each part, which is stored in said storage unit; (Col 3, lines 54-62; Col 5, lines 7-16; lines 34-67)

a step of searching said storage unit for each piece of process information tied to each of said specified parts; (Col 5, lines 34-67)

a step of classifying the retrieved pieces of process information according to a life stage to which a basic process included in each piece of process information is assigned, using the stage definition information of said designated product, which is stored in said storage unit; (Abs, Col 2, lines 54-59; Col 3, lines 54-62; Col 4, line 44 – Col 5, line 16; lines 34-67) and

a step of reading environmental load information including information on a basic process included in each retrieved piece of process information, and aggregating information on environmental load items included in the read pieces of environmental

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load information, for each life stage. (Abs, Col 2, lines 54-59; Col 4, line 44 - Col 5, line 16)

Regarding claim 12, Miyamoto discloses a computer readable program, wherein: a storage unit of a computer stores: part information, which is information on various parts or a product and includes information on other parts having a parent-child relationship to the various parts; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose "part information" it is apparent from the specification of Miyamoto that the processes disclosed pertain to the production of parts and thus it remains at least obvious over the disclosure to direct the invention to physical "parts." Additionally note the above claim is further rejected as "parts" may also be interpreted as any portion of a whole including processes to produce it.)

process information comprising information on a basic process that is defined according to a predetermined rule and relates to production of the product, and information on a part tied to said basic process; environmental load information, which comprises information on a basic process and information on environmental load items affecting environment in said basic process; (Abs; Col 2, lines 26-30; lines 47-53; Col 4, lines 1-18; lines 34-43; While Miyamoto does not specifically disclose anyone of a specific role defining process information, it does disclose an openly available input section and it would have been at least obvious to one of ordinary skill in the art at the time of the

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invention to allow the supplier of a part to define such information as they are generally the most knowledgeable about it if it is not already inherent within the implementation of Miyamoto)

and stage definition information, which comprises information on basic processes assigned to each life stage of the product; (Abs, Col 2, lines 47-53; Col 4, lines 1-8 Note that while Miyamoto does not specifically disclose "stage definition information" the interrelated processes define stages "during a life cycle of a product from its production to its disposal" and in this case the processes can be considered to define the stage of the life cycle) and

said program realizes, in an operation unit of said computer: a function of receiving designation of the product through an input unit; (Col 2, lines 35-42; Col 3, lines 55-62; Col 4, lines 27-33)

a function of specifying parts constituting the designated product, using the part information of each part, which is stored in said storage unit; (Col 3, lines 54-62; Col 5, lines 7-16; lines 34-67)

a function of searching said storage unit for each piece of process information tied to each of said specified parts; (Col 5, lines 34-67)

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a function of classifying the retrieved pieces of process information according to a life stage to which a basic process included in each piece of process information is assigned, using the stage definition information of said designated product, which is stored in said storage unit; (Abs, Col 2, lines 54-59; Col 3, lines 54-62; Col 4, line 44 – Col 5, line 16; lines 34-67) and

a function of reading environmental load information including information on a basic process included in each retrieved piece of process information, and aggregating information on environmental load items included in the read pieces of environmental load information, for each life stage. (Abs, Col 2, lines 54-59; Col 4, line 44 - Col 5, line 16)

Conclusion

5. The prior art made of record in this action is as follows:
 - a. Miyamoto (US 5,768,129)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRUCE A. WITZENBURG whose telephone number is (571)270-1908. The examiner can normally be reached on M-F 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruce A Witzenburg/
Examiner, Art Unit 2166

/Etienne P LeRoux/
Primary Examiner, Art Unit 2161